

STEEL A POWERFUL FORCE IN BUSINESS

Made Possible Concentration of Commerce, Resulting in Lofty Structures.

THE NEW ARCHITECTURE

Ancients Raised Necessity to Virtue—Modern Expression in Treatment.

By WILLIAM VAN ALLEN.

Of Structures and Van Allen, Architects.

STEEL has exercised centripetal force on business. It has made possible a concentration of commerce in and about important business centers. The result is realized in towering commercial buildings, not possible before its use in building construction. The architecture of the Old World was the decorative expression of masonry construction which, due to the nature of the materials used, called for colossal columns, deep reveals, limited span to lintels or the use of the arch, which again required buttressing or heavy angle piers to take up the thrust. Familiar examples of such old world architecture are to be found in the Parthenon, the Roman temples and the palaces of Italy.

The influence of such architecture, with its beauty, strength and grandeur, is to be found in many commercial buildings in American cities, constructed before the advent of steel as a structural material. It has been with the greatest reluctance that we have departed from symbols and forms developed by use of masonry, although that form of expression has long since lost its significance. The architects of the new era have been forced to find their expression for the thing used in their treatment of the thing itself, unless they are willing to brand that thing as a lie in its face.

When you clothe a steel structure with the elements of architecture, as used in structures built of masonry, you are not expressing the steel, which is the real construction. The walls of steel structures are enclosures only and have no structural function and by so doing they give significance to the steel by which they are carried, consequently their treatment should not be heavy in effect but rather demands a flatness of treatment, which is more significant. The proper development along those lines should produce ultimately a new type of architecture, that is purely modern, expressive of its construction and peculiar to our needs and as individual as the Gothic cathedrals and the Grecian temples.

Essential Features in Building.

The essential features to be regarded in a business building, if it is to be a commercial success, are economical use and distribution of space, with particular reference to the convenience of all those elements can be conserved to the point of highest efficiency in our modern commercial buildings. The elements of steel structure have a great advantage that steel construction has over stone and wood are:

Greater volume of building on a given area.

Freedom of floor space, due to thinness of walls required in steel construction.

Larger spans between columns and often their entire elimination in interior spaces.

Elimination of reveals permitting the glass to be installed flush with the outside face of the wall, thus eliminating the shadows and securing the maximum of light from each opening.

Greater percentage of natural light area in exterior walls.

Distribution of columns with regard to logical and economical partitioning of space.

It is a far cry from the Tower Building, the first office structure built of steel in this city and which stood at 29 Broadway, to the Woolworth or the Municipal buildings, of later design. Ambition, pride, avarice, experimentation all have played a part in the building of the tall and still taller structures, until it seemed as if our architects, engineers and capitalists were sitting together in a game when the slogan was "The sky's the limit."

The menace of such ruthless destruction of property rights and public welfare was finally recognized and as a result we have now a zoning law. The effect of which is to safeguard the future development of our crowded business centers. Contrast here, if you will, the character of the lower Broadway with the open stretches of our highly developed midtown section, built since the zoning laws have been in force, which proves that the zoning law is a step in the right direction. The practical application of that part of the law which requires setbacks in a building above a certain height is not, in our judgment, a detriment to values inherent in real estate, but, on the contrary, tends to stabilize values by the protection it guarantees in preserving proper standards of light and ventilation by creating areas of interior courts and yards as the height of the building is increased, thereby preserving open spaces as a protection not only to itself but to adjacent and surrounding properties.

Proper Balance Maintained.

In two of our buildings, the Gidding Building and the Bar Building, we have complied with all of the setback restrictions and have retained the maximum amount of floor space permitted, as shown in the illustration. In both cases there was provided the maximum of full amount of stories on the buildings' front. This of itself is of great commercial value.

We are just beginning to realize the real blessings of our zoning law. Its influence will be far-reaching, as proven by easier limitation that has been evident in the action of many larger American cities.

Although hardly within the province of this article, which has mainly to deal with the evolution of architecture, one might almost say the revolution of architecture, due to differences in structural material used, to discuss the value of commercial buildings in relation to location and surroundings. It is nevertheless obvious that the availability of the plot and the adaptability of the treatment to a certain character of architecture with reference to its surroundings, atmosphere and uses is the one who, through his sense of the fitness of things, will produce that which being practical in design will harmonize with the tone, the temper and the trend of the section in which it is to be set.

The time has passed when the job of the architect was simply to make plans that were pleasing. He is called on today to combine the exquisite with the economic, the beautiful with the practical and the artistic with those attributes which breathe of the material that is the body and base of the thing that he is to build.

BETTER HOUSING IS QUEENS' BIG ASSET

Cheap Land, Transit Facilities and Labor Easily Obtained Also Draw Industries.

METAL WORKERS IN LEAD

Only Seventeen Cities Outside New York Outstrip Borough in Products.

By PERCIVAL MULLIKIN.

Assistant Secretary, Chamber of Commerce of Queens.

A BEAUTIFULL white city of artistic industrial buildings, aptly describes the big manufacturing center which has sprung up mushroomlike in Long Island City during the last decade. Indeed, so rapid has been the industrial growth throughout the borough that Queens exceeds all but seventeen cities in the United States, outside of New York city, in the value of its manufactured products, according to the last United States census.

Statistics compiled by the Queens Chamber of Commerce show that these industrial plants, of which there are more than 1,500, employ upward of 40,000 persons in normal times. The number of factories has been increasing for the last two or three years at the rate of two a week.

Almost every line of industry is represented, but the most important is metal manufacturing. Food products rank second, chemicals third, textiles fourth and wearing apparel fifth.

The borough's rapid industrial growth is due to several causes, all of which are big factors in planning the establishment of a manufacturing plant.

First, perhaps, is the item of transportation. Queens has both rail and water facilities superior to most places in the United States and is convenient to the greatest market of the world. The borough has 219.5 miles of water frontage measured around piers and shore lines. Rail service to all parts of the United States is supplied by the Long Island and the New Haven railroads, and bridges and ferries connect the borough with Manhattan and Brooklyn, so that a great part of the deliveries can be made by truck.

Land here is cheap compared with that in other sections not so favorably located, and labor is easily obtained. The splendid transit facilities making the borough easily accessible from all sections of the city. These and other factors have contributed to the growth of an industrial center which has been phenomenal.

The United States census of 1909 showed that Queensborough at that time had 71 factories employing 23,891 men and women, and with capital to the amount of \$145,300,000 invested, turned out that year manufactured products to the value of \$14,000,000.

The census of 1919, the last full year for which figures are available, showed 1,249 factories, employing 56,918 persons and having an output valued at \$21,000,000, more than double that of ten years before.

Many large automobile manufacturers have established assembling plants or factories in Queens, as it is easily accessible to the automobile center in Manhattan. A large number of candy and shoe factories have settled in the borough.

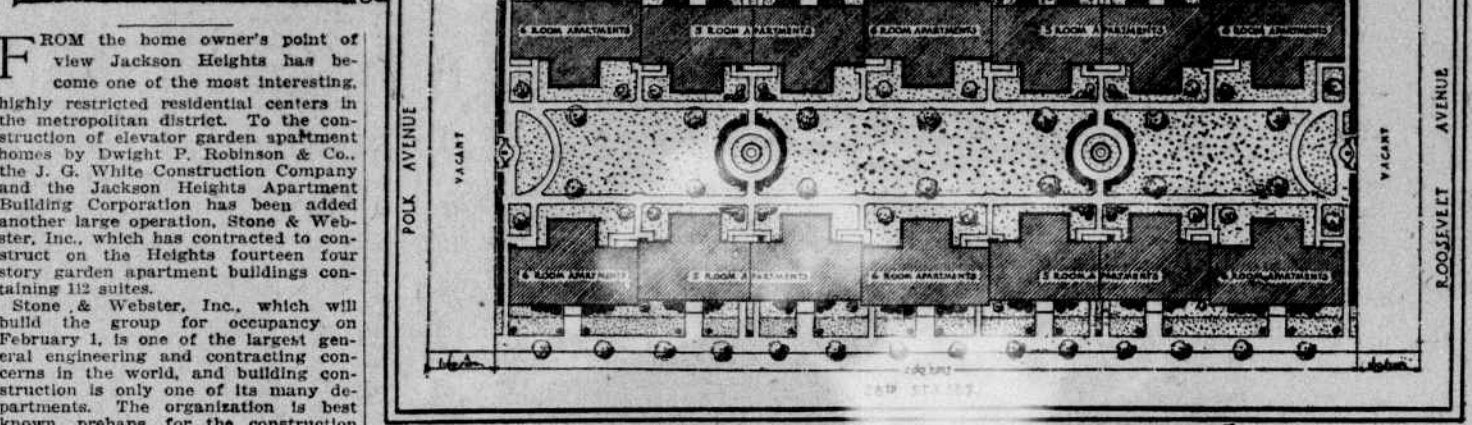
The location of the big manufacturing plants has created a demand for housing that the employees might live near their places of employment year after year. The builders and developers were not able to build fast enough to keep pace with the rapidly growing population.

During the last two years, however, a situation has arisen considerably relieved by the erection of thousands of homes of the single and multiple family and apartment house type. Such building has been particularly active in the three industrial centers—Long Island City, Jamaica and College Point.

BUFFALO MAN RENTS HOME.

Hagstrom-Cullen Company leased for three years the four-story dwelling 118 West Eighty-first street for Spencer & Co. to Camille S. Gerrard of Buffalo, who will occupy.

New Garden Apartments for Jackson Heights



FROM the home owner's point of view Jackson Heights has become one of the most interesting, highly restricted residential centers in the metropolitan district. To the construction of elevator garden apartment houses, Dwight P. Robinson & Co., the J. G. White Construction Company and the Jackson Heights Apartment Building Corporation has been added another large operation, Stone & Webster, Inc., which has contracted to construct on the Heights fourteen four-story garden apartment buildings containing 112 suites.

Stone & Webster, Inc., which will build the group for occupancy on February 1, is one of the largest general engineering and contracting concerns in the world, and building construction is only one of its many departments. The organization is best known, perhaps, for the construction of great power stations, water power development and other engineering plants throughout the country. The operation at Jackson Heights is its first apartment building enterprise in this city.

Ground for the new buildings was broken only four months ago and the fourteen buildings are 75 per cent. completed from the structural point of view. All the structural steel has been erected with the exception of the small amount of work remaining to be done on the mansard roofs. Three-quarters of the brick work is completed. The water and sewer connections for the buildings have been made, the heating plant and a large part of the piping, heating and plumbing apparatus has been installed.

John S. Adey of Stone & Webster, Inc., in discussing yesterday the quick progress in building, said: "The progress we have made in Jackson Heights is just a matter of organization. For instance, the woodwork for our new Queensboro apartments, like the steel, has been cut, fitted and numbered at the shop in advance of its placement. In this way it goes right into place on the job at a great saving of time, materials and expense."

"From the standpoint of the tenant-owner, these new Jackson Heights apartments will be extremely attractive. In addition to the plenty of space and air, the apartments are noted for their compactness, the soundproof partitions enclosing each apartment, the stair wells and the thorough equipment of the bathrooms and kitchens."

"The most important feature, perhaps, is the large interior garden court, which to a degree eliminates the usual rear rooms and provides a most attractive outlook from the rooms of the apartments facing on the garden. In planning these buildings no effort has been spared to provide for the safety and comfort of the tenant-owners. This, together with the quality of the construction which is guaranteed by the reputation of Stone & Webster, Inc., the combination of advantages is complete."

In discussing Jackson Heights E. A. MacDougall, president of the Queensboro Corporation, said: "The Queensboro Corporation, with the cooperation of prominent engineering and construction concerns, representing some of the largest building concerns in the world, is hastening the development of the hundred city blocks at Jackson Heights and building new elevator garden apartment houses to meet the demand for garden apartment homes in the city with excellent transit facilities, and yet at a comfortable distance from the noise and turmoil of the heart of the city."

"The new elevator garden apartment houses at Jackson Heights recently completed or in course of construction will accommodate 500 families and represent an investment of more than \$3,000,000."

"Two of the groups of new buildings, costing \$2,000,000, have been erected by the Jackson Heights Apartment Building Corporation. Apartments in those houses are being sold rapidly, as also in the Dwight P. Robinson group, which also cost \$2,000,000. The J. G. White Company group cost \$2,000,000 and will be ready for occupancy on October 1. Several apartments in that group of houses have been sold. The Stone & Webster group, costing approximately \$1,800,000, will be ready for occupancy on February 1."

"The success of the Jackson Heights plan of tenant-ownership of apartments is what has induced prominent construction interests to undertake the present large building program."

SALES IN MANHATTAN REVEALED IN RECORDS

The 551 West 129th Street Corporation bought from the Iannelli Realty Company the five-story apartment 608 St. Nicholas avenue, 18x22.2, near 141st street, and from Caroline Ellman the five-story apartment at 228 West 142d street, 27x110.

Jacob E. Lewis sold to the Eclaw Company the block front on the west side of Fort Washington avenue, between 172d and 173d streets, 196x125 irregular.

Robert S. Pettigrew, executor, sold to Frank and Gaetano Parrino the four-story flat, 2435 Amsterdam avenue, 22x114.09, near 184th street.

Myer Dundon resold to Giuseppe Iacolina the five-story tenement, 216 East Ninety-fifth street, 25x100.8.

Leonard Wall resold to James Morfsey the three-story dwelling, 726 East Forty-first street, 16x88.9, and the adjoining and similar house at No. 323 was sold by Joseph Spel to Mary Buran.

Lillian Blumenthal sold to Marcus Adler the three-story dwelling, 355 West 119th street, 19x100.11.

BUILDING DEAL IN SUMMIT.

The Duncan Company, recently organized by John D. Hood, cashier of the National Bank of Summit, N. J., has purchased the Larned block, at 446-452 Springfield avenue, Summit. The property fronts 108 feet on the avenue and extends back to the Lackawanna Railroad. It includes four large stores with apartments above, and a large garage and warehouse in the rear, which are leased to the Public Service Gas Company. Alterations are to be made by the buyers. The Eugene Jobs-H. F. Beck Company were the brokers.

APARTMENT RENTALS.

Culver & Co. leased for Mrs. Ethelbert Nevin her garden apartment in the new building at 136 East Sixty-seventh street to Mr. and Mrs. Lydie Hoyt; also leased for Charles G. Copeland an apartment in 129 Madison avenue to Harry L. Purdy, and for Walter Watson the parlour floor in 52 West Fifty-second street to Ansel S. Leo.

ALTERING CLARIDGE HOTEL.

The most notable change in the Times Square section is the reconstruction of the lower floors of the Claridge Hotel at Broadway and Forty-fourth street. The basement and street floors are being converted into stores. All the upper floors are being operated for hotel purposes by Edward Arlington while the remodeling processes are under way.

TO SELL ESTATE OF LORILLARD SPENCER

J. P. Day Will Auction Famous Tract Near Pelham Bay Next Month.

The Lorillard Spencer holdings in the Pelham Bay section of the East Bronx, comprising 1,300 city lots, are to be sold at auction on October 12 to 14, inclusive, by Joseph P. Day. The holdings are on Middletown road, Eastern Boulevard, and with large frontages on Long Island Sound. The Pelham Bay branch of the Lexington avenue subway operates to within six blocks of the estate.

The estate was purchased by Lorillard Spencer seventy-five years ago and was one of the show places of the Throgs Neck section. One of the first polo matches in America was played on the grounds and numerous yacht races and other events were arranged there.

The lots are near the great Pelham Bay Park and the Mrs. Isaac L. Rice Stadium. The auctioneer said yesterday that he had a splendid estate lot as the cream of the Pelham Bay Park waterfront section. The sale will begin on Columbus day and will be continued until the lots are sold. It has been ordered by the heirs of the Spencer estate and the New York Public Library.

"It is one of the finest estates I have ever been privileged to sell," according to Mr. Day.

PLAN YORKVILLE FLAT.

Plans have been filed for a nine-story apartment building at 115 East Ninetieth street, for the Columbus Contracting Co., Inc., of 103 Park avenue. V. C. Farrar, the architect, estimates the cost at \$300,000.

SALE ON WILLETTT STREET.

Albert Hochster and the estate of August Burdette sold to Willett & Co. the corner Stanton street, a six-story tenement and stores, 25x75, to Harry Pines for investment. B. Chankin was the broker.

New Operation on Fifth Av.

Remodeled specialty shops of Franklin Simon & Co. and their new building at Fifth avenue and Thirty-eighth street. The new structure fronts 285 feet on Thirty-eighth street, 75 feet on Thirty-seventh street. It stands on the site of what was the country residence of W. C. H. Wadell sixty years ago. Later the site of the house was occupied by the town house of Mrs. Orme Wilson, daughter of John Jacob Astor.

FINE ARCHITECTURE AN ASSET TO BANK

Deposits of Institutions Show Increases After Moving to New Buildings.

APPEAL TO CUSTOMERS

Workers Take Pride in Better Quarters—Dingy Offices Relegated to Past.

By ALFRED C. BOSSOM.

THE very hackneyed "Nothing succeeds like success" applies directly to a bank in a fine new building. Of late banks have taken to advertising on a very extensive scale, but they invariably draw their business from the immediate area adjacent to the bank building and the demonstrated prosperity of the bank, by being in a new building, has a most beneficial effect.

In our experience, covering the desiring of more than sixty bank buildings throughout the country, we have kept figures on the increase of the deposits over the period from which a bank started working in a new building. The average increase has been more than 30 per cent., which in the majority of cases has been more than sufficient to pay for the new structure.

As an example, the Columbia Trust Company's Harlem branch on 125th street was in a very good location, but in an old building, which did not give very good accommodations to its customers. It put up a new building and within three months after the completion of the building the deposits were more than 31 per cent. more than at the time they had before, and at a period when all the other banks in the locality were standing still or slightly slipping.

Good architecture has a doubly beneficial effect on a bank. It gives the depositor a sense of pride when they walk in. It gives the workers in the bank a sense of pride, knowing that they are working in a fine new building. It increases their ambition and every one walking by the structure knows that a new building has to be paid for, and no conservative banker would undertake any large expenditure unless the bank was amply able to afford it. For twenty-four hours a year a new building strikes up and shouts for the bank's solidity.

This does not signify that every bank in a small building is not equally strong but to a layman there is no question that an imposing building creates a mental reaction of solidity and safety. One has only to look down the list of big banks of the country to see how they have followed that example. Practically every Federal Reserve branch is building a new building or has done so recently.

The Guaranty Trust Company, the Bank of America and the Commercial National Bank, the Columbia Trust Company and the Corn Exchange Bank are a few here in New York that everybody has seen recently follow that plan.

Take the form of bank advertising today and almost without exception the bankers portray their offices as a demonstration of their success. In addition to that side of the business, a new building always enables the bank to give better accommodation to its customers and the customer to transact business with greater speed and ease and under easier conditions than those prevailing in such old buildings that have been modified and revamped to meet conditions as the banks have grown.

The advantage of the conservative old bank in unsatisfactory and dingy quarters is past. We are living in a world of motion. Success is illustrated by progress and progress is shown by buildings, and the banks of this country and of New York in particular have stepped forward and set an example that other communities can follow with great advantage.

WILL SELL 300 LOTS IN MAMARONECK AND RYE

J. P. Day to Place Sterling Properties on Block.

The residential property formerly owned by the late John W. Sterling of Shennock & Sterling attorneys, and situated partly in Mamaroneck and partly in Rye, Westchester county, are to be sold at auction on the premises on October 7 by Joseph P. Day, Inc. The property consists of about 300 exceptionally well located residential sites on the Boston Post road, Harrison and other avenues, opposite Shore Acres colony on Mamaroneck harbor.

Seventy per cent. of the purchase price may remain on mortgage according to the announcement of the auctioneer. In the vicinity of the properties are several well known golf and country clubs and about two miles distant are Oakland Beach (Rye) and the new \$5,000,000 Biltmore-Westchester Country Club, to which Harrison avenue leads directly. Ward & Carpenter Co. of White Plains is agent for the owners of the lots.

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Standardization Lowers Bossert House Prices



BOSSERT HOME OF RAYMOND HEALEY at COLD SPRING-ON-HUDSON.

A MID grant piles of lumber, constantly being unloaded from ships lying along Newtown Creek, Brooklyn, is the big plant and office buildings of Louis Bossert & Sons, Inc. The Bossert estate, which has a half a mile of deep water along the creek can accommodate steamships and sailing vessels. Thus the plant has a direct outlet to the open sea, facilitating the company's import and export business on a large scale.

In the Bossert yards all kinds of hardwoods, pine timber and lumber are carried in stock totaling approximately 50,000,000 feet of lumber at all times. The factory buildings occupy more than 200,000 square feet of floor space and in them about 1,200 men, experienced in the manufacture of articles of all kinds from lumber, are employed. Huge dry kilns of enormous capacity provide for properly seasoning lumber, a matter of vital importance. There is also special machinery for standardizing the lumber, and for the manufacture of "ready-built" and "ready-cut" houses.

Standardization and organization in a plant of this kind prevent all kinds of waste, as all surplus material is used in many ways for the creation of by-products, thereby insuring the greatest amount of production at the smallest cost of production, naturally reflected in prices, lower than would be possible if but one article were manufactured.

A visitor to the Bossert yards, which cover more than thirty-two acres, enters the plant from Grand street, along which a car line passes the property, and in which labor is cheap the ready-cut type is the best, but for localities in which skilled labor is hard to get the sectional house is better. The sectional building can be erected with unskilled help, but with the ready-cut style a lot of money can be saved on lumber.

"A conservative estimate is that we can save the home builder 25 to 30 per cent. because we do not give him a lot of lumber to be thrown away. Our houses are cheaper also because we have him the cost of the architect's plans. From many plans which have been drawn by leading architects a man can pick out the style of house

that he likes, and if he wants minor changes in a plan he will make such alterations as larger rooms or smaller rooms, make changes around a window or a closet or other modifications. On the other hand, if a man wants to enter an architect's office, he will find him furnish him with material in line with the architect's plan. Our plans, however, enables the home builder to eliminate the costly and time consuming process of time necessary for drafting specifications and obtaining contractors' estimates. It also puts at the home builder's disposal the services of architects of higher skill than the average family can afford to pay for.

"If a man desires to build a house on a site a long way from our factory in a place to which the freight haul would be long and the transportation charges heavy, it would be wiser for him to have us build his house more completely. We have sold houses here in India, Brazil, near the Equator and in Iceland.

"We are finding an ever increasing demand for our ready-cut houses," continued Mr. Bossert, "and this is easily understood when the economy and the method is brought to the attention." Whereupon Mr. Bossert escorted the writer through a sample ready-cut house erected on his grounds and known as the Meadow Brook Model. The house as the Meadows Brook Model, in addition has a dining alcove, a spacious living room, a kitchen and a bedroom and two bathrooms and a bath on the upper floor. The porch is of ample size, with pergola beams and flower trellises. From the porch handsome double French doors open into the well lighted living room. The dining alcove, which dining alcove offers a substitute for the dining room, which can be utilized as another bedroom.

The second floor bedrooms are not exposed to the roof; closets on two sides and an air space above insulate these rooms, so that they are not the usual hot bedrooms of the semi-bungalow house. Closet space is plentiful. The windows on the exterior side walls are exposed ten inches to the weather, producing the old Dutch Colonial effect. The interior trim is of cypress, which may be painted or stained, or only \$2.00," continued Mr. Bossert, "this house may be had in accordance with our ready-cut plan. The price covers plans, specifications and construction, all framing lumber sized to width and cut to fit, mill work, siding or shingles, porch material, window frames put together, sash, interior work and doors, dresser material, lath and plaster or plaster board, hardware, nails, paint, stain and floor varnish.

"We have erected homes costing as much as \$20,000, and we also build churches and schools and manufacture houses, washes, doors, blinds and other things, which we sell separately."

SECTIONAL OR READY CUT BUNGALOW.

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HOW HORSE POWER IS AID TO BANKING

Well Kept and Efficiently Managed Quarters Most Important Factor.

FRESH AIR IS ESSENTIAL

Quality of Service Is Greatly Influenced by Physical Equipment at Hand.

By FRANCIS H. SLOSS.

Vice-President Guaranty Trust Company of New York.

WELL kept and efficiently managed business quarters constitute one of the most important of the many factors which make for a successful organization in any line—perhaps in the banking business more than in any other. The quality of service rendered by any banking institution is influenced in no small degree by the physical equipment it has at hand with which to carry on its business.

Power driven machinery, such as that which runs the elevators, ventilates the building, cools the water and operates the signs and other kind of physical equipment. In the main office of the Guaranty Trust Company of New York this equipment includes nearly 100 electric and steam machines and consumes thousands of dollars' worth of power monthly. It is the purpose of this article to state a few things about the back stage equipment which is of such great importance in any modern banking house.

Wherever large numbers of employees are working together, good ventilation is of primary importance. The system used by the Guaranty Trust Company is adequate to supply fresh air to a building of much greater floor space than is called on to serve. Dotted the ceiling are numerous small supply registers. The air which is delivered by the registers is not simply air taken from the outside and forced through the building, but is first screened of all of its dust and then actually water. Next the humidity is corrected and, if necessary, the air heated before being dispatched through the building. Frequently samples of air are taken from some of the more congested departments. These samples are analyzed and so far every specimen tested has proved to be pure.

100 Signal Buttons.

To maintain such fine ventilation a plant of considerable size is needed. In the main office of the Guaranty Trust Company there are ten ventilating fans, ranging from four to five feet in diameter, driven by individual motors of twelve to twenty horse-power. For maintaining the spray in the ceiling, there are several small pumps, driven by seven and a half horse-power motors, are used. There are also more than 250 small fans distributed around the building.

Placing controls throughout the building are numerous small sensitive thermostats, which automatically turn steam on and off in their respective locations, thereby maintaining a pre-arranged temperature. These are equally sensitive thermostats regulate the temperature of the hot water. Connected with the heating equipment are four steam pumps, which relieve the system of excess pressure.

The building contains about 200 wall cabinets which house the terminal strips for the signal system. From these cabinets many miles of wires radiate in all directions. The installation of these wires is of different colors, a color noting the particular use of the signal, such as for riot calls, messenger service, telephone or page service.

At the present time the signal system has about 700 buttons, which operate about 100 annunciators, sixteen bells, more than 100 buzzers and eleven door openers. In addition, the company's twenty-seven telegraphs operate on the system.

The power for the signal service is furnished by a twelve-cell storage battery plant, which is a complete unit in itself. There are two motor generators of charging the batteries. These generators have their necessary fire resistances, starting rheostats, measuring instruments and switches, all mounted on the main switchboard. The storage battery also furnishes current for the operation of the clock system. A large master clock in the building department operates a train of relays, which, in turn, synchronizes sixty clocks distributed throughout the building.

The pneumatic tube system has a unique control arrangement, whereby the speed of the fifteen horse-power motor which operates it is governed by the demand for air at the central tub room. It is interesting to watch the speed control arm dancing over the contacts.

Every Floor a Unit.

In the Guaranty's restaurant there are several useful power driven machines. One may see there a machine peeling potatoes, another mashing them, one cutting bread, another washing dishes, one machine sharpening the silverware and another sharpening the knives. A small but unique machine opens cans. A peck into any of the elevators shows why it is more advisable to make ice than buy it. The refrigerator plant is capable of producing a chilling effect equal to a daily supply of twenty tons of ice. In addition to keeping the stores in condition, it chills all drinking water of the stationary system and makes all ice necessary for the portable water coolers.

The building has elaborate fire fighting equipment. Every floor is practically a complete unit in itself. On every floor there are at least two hose connections supplied by a roof tank. The tank has a capacity of 150,000 gallons of water. Water can be supplied to the tank by three pumps at the rate of 600 gallons a minute. There are also two standpipes in the street to which the Fire Department can connect its hose lines and pump water directly into the hose connections. Every floor has at least three chemical fire extinguishers and a fire alarm box which is connected directly with the Fire Department.

Where there are possibilities of electrical fires special fire extinguishers are provided. In the paint shop, printing department and kitchen, in which grease and oil are used, large cans of fire extinguishers are kept. There are also the ammonia tanks of the refrigerating plant, there is a special connection whereby the Fire Department can pump all of the ammonia out of the building. The waste paper storage room is equipped with a sprinkler system.

All retired bonds, notes, documents and records, for which there are no further uses, are destroyed in a specially constructed incinerator, which is so designed that even a small portion of a coupon cannot be blown out through the fire without first being burned. All doors of the incinerator are equipped with locks, so that when it is charged with documents and ignited the door can be locked and the key turned over to the cremating officer.